Can Schools Mitigate Social Inequalities in Students' Mental Health?

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BACKGROUND

- Reducing child mental health inequalities constitutes an important public health priority
- Schools are an ideal context for effective action
- However, studies in Canada have yet to examine the extent to which schools influence student mental health and mitigate social inequalities

OBJECTIVES

(1) To estimate between school and classroom differences in student mental health outcomes, before and after adjusting for student compositional effects; and

(2) To examine the extent to which school climate (quality of school relationships) accounts for these differences and reduces mental health gaps between students of different socio-economic and demographic backgrounds

METHODS

Design & Sample:

- 248 schools in Ontario (Canada) stratified by urban/rural, elementary/secondary & median family income at the community level. 72% elementary & 85% urban schools
- 31,124 students: Mage=13.5 yrs, 52% female, 15% migrant, 57% White

Measures:

Student Mental Health[1]: Internalizing (9 items; α=0.90) and externalizing (13 items; α=0.87) behaviors

School Climate – Quality of Relationships[2]: Perceived teacher- and student-student relations (7 items; α=0.84)
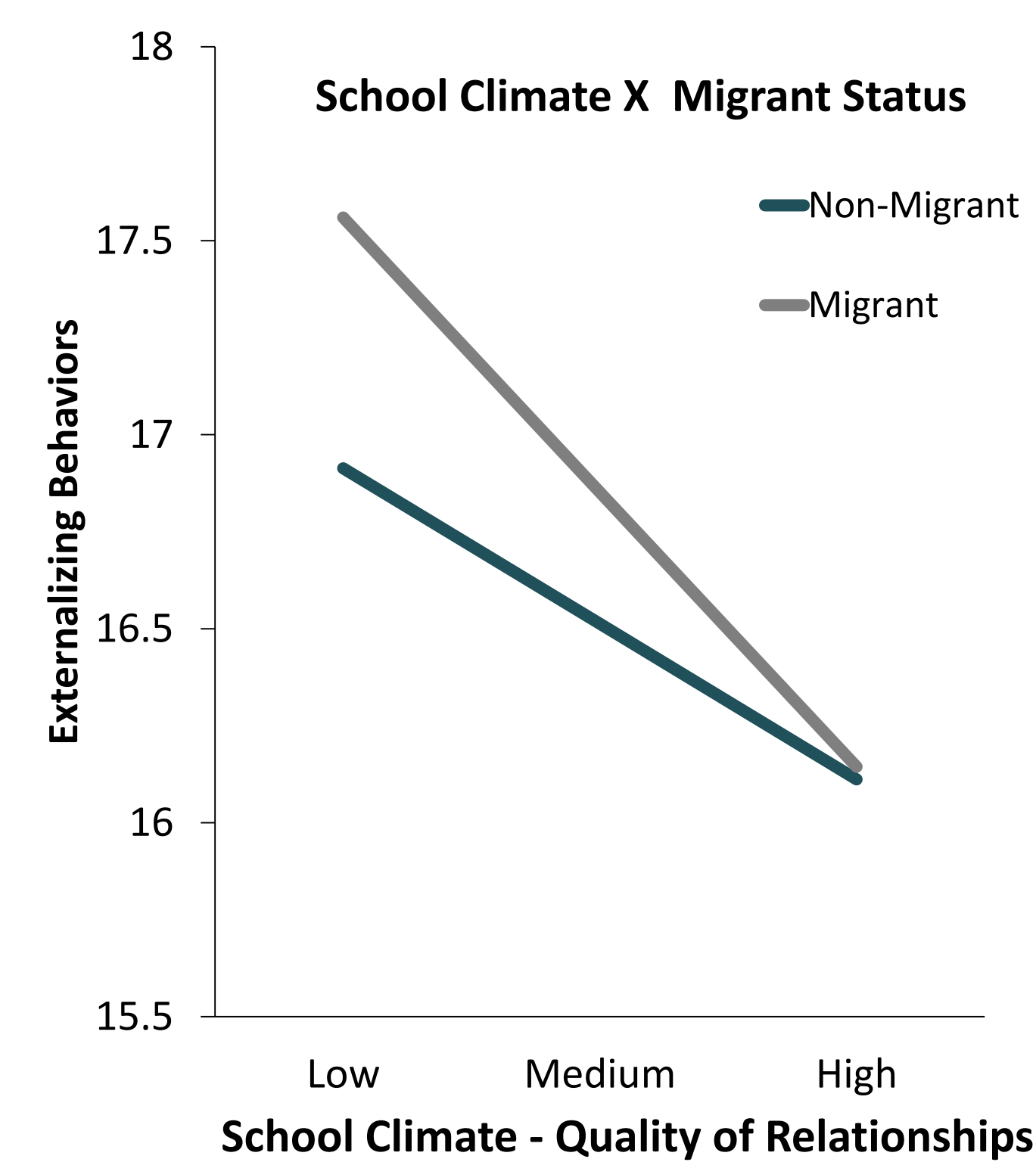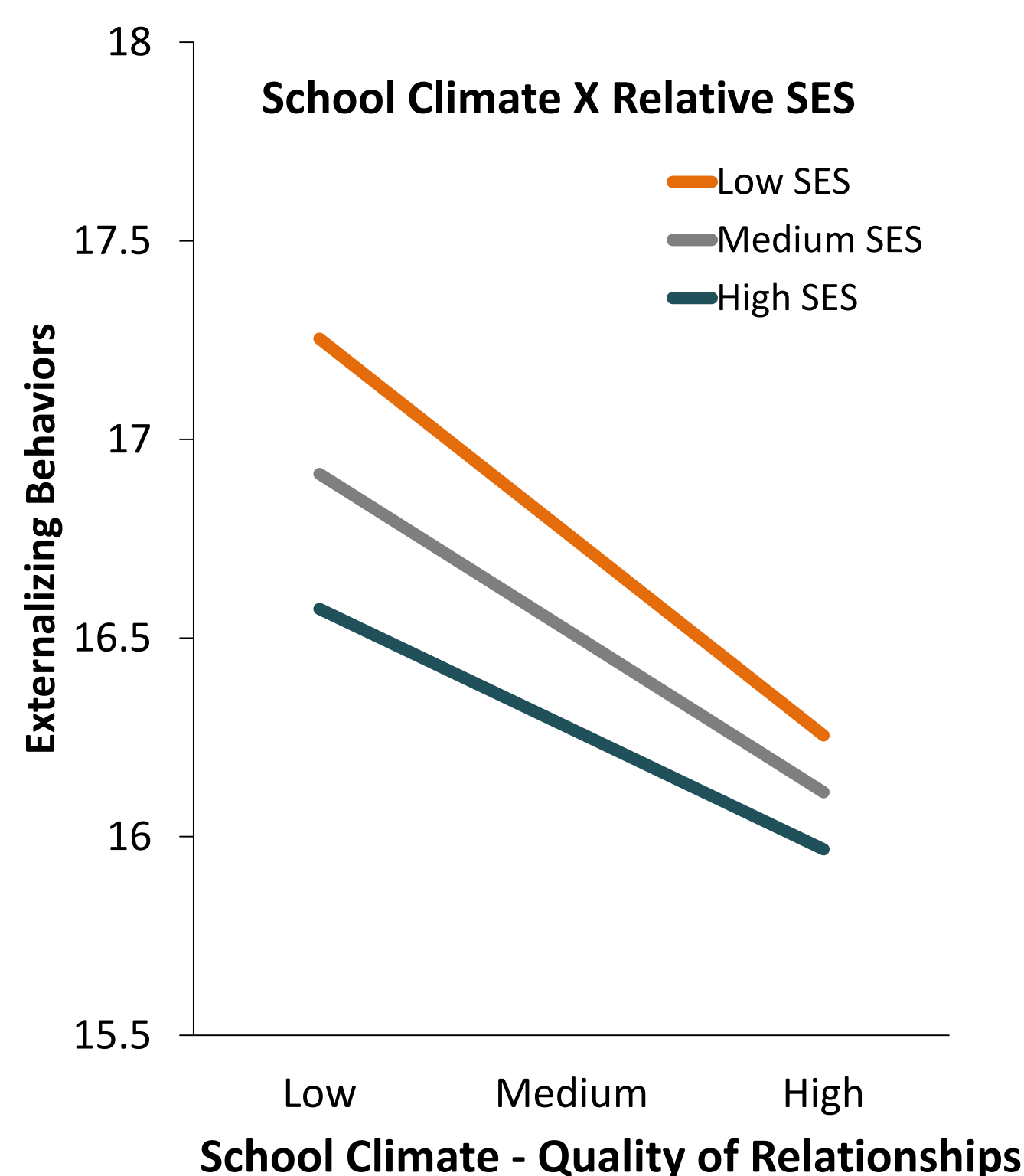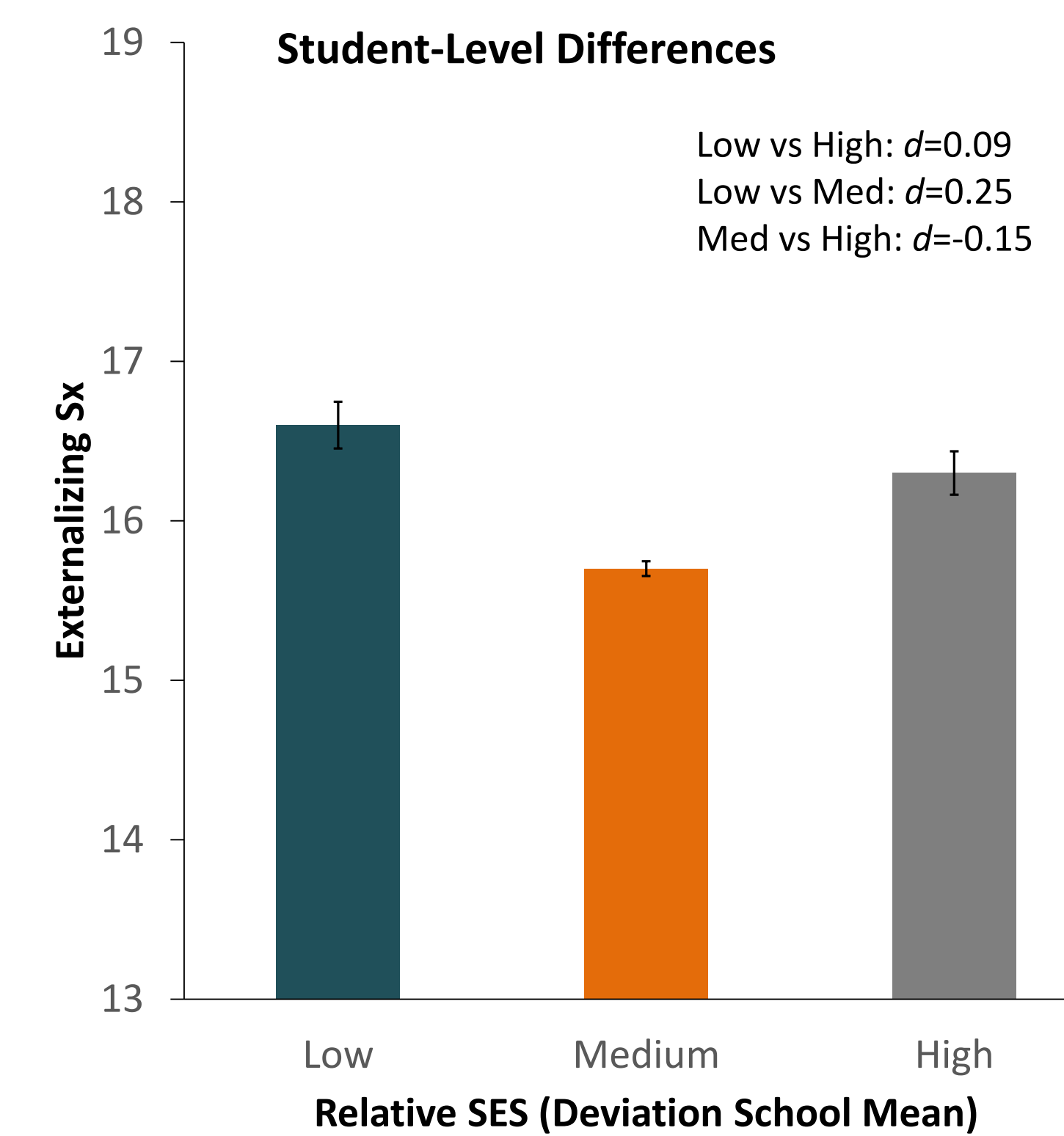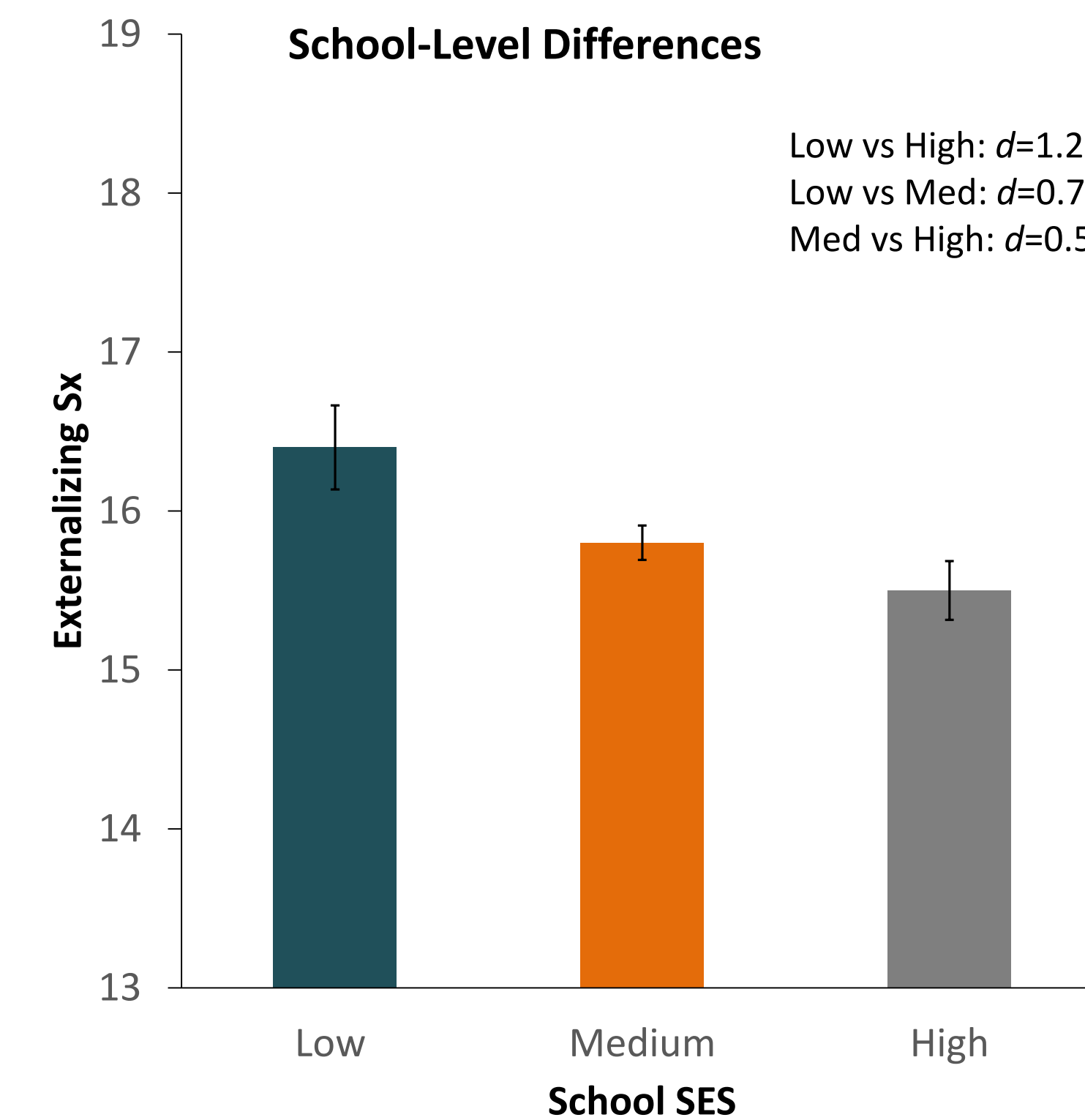
Asset Index[3]: Family SES indicator, factor score

Socio-demographic: age, sex, migrant

RESULTS

Analyses:

- Multi-level, linear regressions of externalizing and internalizing behaviors built sequentially:
  - M1: 'null' model to estimate intra-class correlation coefficients (ICCs)
  - M2: school and individual level SES indicators (mean, deviation)
  - M3: school climate (relationship quality), cross-level interaction with SES

School-Level Differences

Low vs High: d=1.2
Low vs Med: d=0.7
Med vs High: d=0.5

Student-Level Differences

Low vs High: d=0.09
Low vs Med: d=0.25
Med vs High: d=-0.15

School Climate X Relative SES

Low SES
Medium SES
High SES

School Climate X Migrant Status

Non-Migrant
Migrant

KEY FINDINGS

Externalizing Behaviors:

- ICCs: 1.9% at the school & 4.1% at the class level
- SES accounts for 30% of the variance at the school and 22% at the classroom level
- SES at the school level is negatively associated with externalizing behaviors (β=-0.53, SE=0.13)
- Relative SES at the individual level is negatively associated with externalizing behaviors (β=-1.89, SE=0.62)
- Migrants students report higher levels of externalizing behaviors (β=-5.48, SE=1.79)
- Quality of school relationships is negatively associated with externalizing behaviors (β=-0.33 SE=0.04) and attenuates the risks associated with lower SES and migrant background

Internalizing Behaviors:

- Results for internalizing behaviors displayed similar patterns as externalizing, with some exceptions and smaller effect sizes

IMPLICATIONS

- Between school and classroom differences in student mental health speak to the importance of intervening at these setting levels
- Modifiable variables within the school setting – such as relationship quality –may reduce social inequalities in student mental health and serve as potential targets for intervention
- Multi-systemic interventions that simultaneously address the social needs of students & socio-contextual aspects of schools may be most effective

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